Seaverns (f.)



Weight as an Indication of the Character of Risks for Life Insurance.*

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The Royal Arcanum, a beneficiary organization, which has to-day nearly 50,000 members, in all the States of the Union except the Gulf States, and has paid out since January, 1868, over \$3,000,000 in life insurance to the families of its deceased members, has among its records up to March 1, 1884, details of the deaths of 974 men between the ages of twenty-one and sixty. These details include, together with the family and personal history of the individuals, statements of their age, occupation, height, weight, rate of pulse and respiration, results of auscultation and percussion of chest, and an examination of the renal secretion, certified to by a medical examiner on their entrance to the Society. At their deaths is added to these facts a certificate signed by the attending physician, giving the duration of the fatal illness, its supposed cause, symptoms, and diagnosis, and the results of the autopsy if one is held

From this storehouse of facts, to which I have been allowed access, many important generalizations may be drawn, bearing upon the selection of lives for life insur-

ance. On only one point to-day, that of weight, and its relation to height, I address you.

You are all aware that for life-insurance purposes, tables have been constructed giving what is considered the natural standard of weight and height. These tables vary but little in different works on this subject, and that which I shall refer to to-day is embodied in the tables here

given.

The general directions in companies and societies are that, while this proportion is the natural one, a variation of twenty per cent from it in either direction is not to be deemed a cause for rejection. I am inclined to think that as regards the candidates of light weight (those whose weight is below the standard), less latitude should be allowed, and that a variation of even fifteen per cent in that direction makes the risk hazardous, and that every applicant whose weight is materially below the standard, even ten to fifteen per cent, should be examined with the utmost care, not only to ascertain whether he has actually at that time any disease, but whether there may not be

some tendency to disease, some weakened, malformed, or imperfectly developed organ, some functional ill performance of the vital processes of digestion, assimilation, or absorption, which, if conditions of life should be unfavorable, may prove to be the starting point of constitutional disease.

Men are thin for various reasons: some because in their families is a hereditary tendency to be so; some because they have diseased lungs, heart, or digestive organs; some because they have recently been sick or are overworked, or have too much anxiety and care, or are illy fed; and the examiner should in each instance gravely scrutinize the problem to see what is in that case the special cause of this effect, and whether it may not be a cause that threatens to shorten a man's years, or at least an influence which shows in what direction to look for future illness or death. And thus, for instance, if there has been in the family history any case of hereditary disease - especially of constitutional wasting disease - or if there has been in the personal history any of those symptoms or diseases that so often precede tuberculosis, such as impaired digestion, hæmorrhoidal tumors, fistulas, etc., and the applicant is at what may be called the consumptive age (under thirty-five or forty years old), he should be unhesitatingly rejected, as one who is not likely to live out his estimated expec

With reference to this question I have made an examination of these 974 deaths with this showing: Amongst them were 138 men, who at their admission were fifteen per cent or more below the standard of weight that we have referred to, and of this 138, eighty-five, or about sixtytwo per cent, died of chronic disease, seven from accident or suicide, and only forty-six of acute diseases. Of the eighty-five chronic cases, forty-two were from phthisis, tabes mesenterica, or pulmonary hæmorrhage; seven died of organic disease of the brain or medulla, caries of the vertebræ, progressive muscular atrophy, and general paralysis of the insane; six died from cancer; three from diseases of the liver; nine from urinary diseases (five of Bright's disease, two from diabetes mellitus, one from chronic cystitis and abcess of the kidneys, and one of stone in the bladder); five died of organic disease of the heart; one of pernicious anæmia, and one of "general debility." The acute cases included pneumonia and other lung diseases, typhoid fever, and diseases of the digestive organs.

Ninety-one of these men were under forty years of age when admitted, thirty between forty and fifty, and only seventeen more than fifty.

Twenty-two died in less than a year after admission, twenty-nine in between one and two years, thirty-four in between two and three years, thirty-six in between three and four years, thirteen in between four and five years, and but four lived more than five years. The average duration of their membership was about thirty-one months.

Now of these 138 only thirty-three were twenty per cent below the normal standard, 105 being in that border-land between what is usually considered safe and the line which I claim should be the dividing boundary; twenty-four of the thirty-three lightest ones were cases of chronic disease, thirteen being of phthisis.

Only nine were more than twenty-five per cent below the standard, and all but two of these died of some organic

disease, four from phthisis.

This is, in brief, a summary of the deaths of such of the 974 deceased members as were at the time of their admission fifteen per cent or more below the usual weight, and in order that the results may be shown more clearly to you I have drawn them up in tabular form and printed them, that you may at a single glance see how extraordinarily prone to constitutional disease are such candidates. And I feel confident that the table will prove conclusively that such risks ought not to be accepted in life insurance.

LIST OF 138 DEATHS AMONG PERSONS WHO WEIGHED FIFTEEN PER CENT OR MORE BELOW THE NORMAL STANDARD.

Height. Feet, Inches.		Standard Weight. Pounds.			Fifteen per Cent less.	Twenty per Cent less.
				-	Pounds.	Pounds
5 O			120		102	96
5 5			124		105	99
5 3			132		112	106
5 4 5 5			136		116	109 112
5 6		144			122	115
5 7 5 8 5 9 5 10 5 11		150		127	120	
5	9	162		138	130	
5	10		168		143	135
5	0	174			148	140
	100			1	-33	-44
		Height, Feet and Inches.	.bs.	Los.		
Number.		nt, I	Weight, Lbs.	Lived, Mos.	C	e of Death.
[m]	ů	ligh	18	/ed	Caus	e of Death.
ž	Age.	He	A	Ę.		
			-			
21	56	5 61	121	7	Abscess of Li	ver.
27	38	5 10	136	3 5		itis
33 34	33 28	58	127	4	Brain.	
36	28	5 94	130	11	Melancholia (Suicide).
37 46	36 29	5 9 4 5 9	140	4	Ulceration of Cholera Mort	Dowels.
58	43	5 10	135	21	Diabetes Mell	litus.
75 89	34	5 10	135	17	Chronic Lary	ngitis.
104	24	5 9	128	26	Phthisis. Tuberculosis	of Intestines
105	33	5 9 5 8 5 8 6 o l	125	20	Phthisis.	or antestines.
811	21	5 8	125	9	Typhoid.	C N. 1 11
I22 I44	36 42	6 01	136	28	Congestion of	se of Medulla.
154	29	6 4½ 5 6½	118	14	Pyæmia.	Dungo.
160	26	5 10	130	6	Typhoid Feve	
166	43 31	5 11	145	23	Bright's Dise Ulceration of	
193	47	5 10	140	21	Pneumonia.	DOWCIS.
195	42	5 10 6 2 ³ / ₄	155	8		
201	54 28	5 9 5 8	135	II	Pneumonia.	
215		5 10	140	28	Pneumonia.	
220	23 48	5 103	145	33	Heart (Organi	ic).
230	35 32	5 112	125	29	Phthisis. Peritonitis.	
249	31	5 10	140	19	Phthisis.	
253	35	58	125	31	Cystitis.	Daniel
254 265	22 51	5 10	120	35	Ulceration of Rheumatism	
270	31	5 5	116	21	Empyema.	
274	24	60	152	29	Cancer.	
286	34 40	5 9½ 5 7	135	40	Pneumonia. Asthma and 1	Nervous Exhaustion.
288	42	58	125	3	Dysentery.	
293	43 46	5 92	136	42 38	Cancer. Disease of Li	77.0 9
305	35	5 9 5 10	135	7	Typhoid Feve	r.
311	27	5 9	135	29	Pulmonary H Pernicious A	æmorrhage.
317	53	5 9 3	130	23	Phthisis.	næmia.
378	32	5 9 ³ / ₄ 5 7	122	30	Phthisis.	
378 381	31	58	133	33	Cancer. Typhoid,	
383 386	24 25	56	115	33	Phthisis.	
391	24	6 2	150	35	Phthisis.	
394	58	5 4½ 5 8½	115	43	Bright's Dise	ase.
398 401	32	5 102	135	37	Phthisis.	
409	56	5 82.	130	38		
414	46	5 102	140	38 52	Accident. Phthisis.	
425	50	5 82 6 0	128	17 d	s. Cerebral Cons	gestion.
429	29	60	150	38	Typhoid Feve Typhoid Feve Phthisis.	r.
430	23	5 9½ 5 II	140	48	Phthisis.	a.
438	44	5 9	135	30	Chronic Diari	hœa.
440	30	5 9 6 1½	156	13	Otitis Interna	, etc.
443 445	39	5 7 5 6	116	25 34	Phthisis.	
451	33	5 8 2	134	22	Gastritis.	
453	27	5 7	121	40	Bronchitis.	
461 462	28	5 6	139	35	Pneumonia. Cerebro-Spina	al Meningitis.
/47x	41	5 4	115	16	Bright's Dise	ase.
474	48	5 11	145	32		Perforation of Bowels.
475 481	25 34	5 10	135	35	Typhoid Feve Phthisis.	24.
487	39	5 42 6 0	115	23	Pneumonia.	
493	33		150	40	Phthisis.	e eto
502 510	42 58	5 10	145	42 59	Psoas Absces	s, etc.
537	49	5 10	135	58	Carbuncle.	
552	52	5 105	135	48	Cancer.	al Waningitia
555 556	38	5 6 ³ 5 6	119	42	Phthisis.	al Meningitis.
569	34	5 111/2	150	15	Valvular Dise	ease of the Heart.
595	52 28	6 o 5 10	150	47	Pneumonia. Chronic Gast	ritis
000		5 10 6 I		32		121401
612	40	OI	150	43	Phthisis.	

-	1	1 4	**		1
		ght, Feet Inches.	eight, Lbs.	S.	
1.		che	H	Mo	Cause of Death.
pe		Pt	ht	-	Cause of Death.
E .	ů	0.00	.00	Je.	
Number.	Age.	Height, and Inc	A	Lived, Mos	The second secon
616	44	5 8	127	32	Bright's Disease.
619	22	5 10	140	45	Phthisis.
621	54	60	145	30	General Debility.
625	48	5 9	125	48	Intussusception.
628	31	50	120	20	Phthisis.
629 644	50	5 8 5 111/2	125	39	Pneumonia. Phthisis following Pneumonia.
653	23	5 10	145	59 56	Catarrho-Malarial Fever.
664	49	50	135	9	Diabetes Mellitus.
666	34	5 10½ 5 8½ 5 9½	144	44	Phthisis.
690	37	5 81/2	135	55	Phthisis.
696	24	5 91/2	136	18	Cancer.
699	25	F 0	120	37	Phthisis.
703	27	5 101/2	126	27	Phthisis. Typhoid Pneumonia.
707	42 35	5 6 5 8	130	53	Stone in Bladder.
713	24	5 10	138	24	Phthisis.
716	42	5 10	140	57	Disease of Lungs and Heart,
					Chronic.
719	27	5 10	135	28	Phthisis.
722	23	5 10	140	19	Measles,
730	28	5 10	130	15	Phthisis.
762 769	35	5 91/2	125	29 48	Typhoid Pneumonia. Pulmonary Hæmorrhage, Phthisis.
773	40	5 9 5 81/2	125		Softening of Brain.
779	21	5 3	110	57 18	Phthisis.
780	51	5 8½ 5 10½	135	16	Apoplexy.
784	38	5 101/2	145	40	Congestive Chill.
789	32	60	150	35	Typhoid.
790	31	6 04	150	41	Bright's.
791	35	5 11	136	43	Phthisis. Cerebral Hæmorrhage.
792	59	5 6 5 10½	128	4I 23	Phthisis.
797 801	28	5 10	135	31	Marasmus.
807	32	5 11	127	47	Phthisis.
812	38	5 10	140	45	Softening of Liver.
816	47	5 10	130	57 7 ¹ / ₂	Progressive Muscular Atrophy.
819	34	5 7 1/2 5 11 1/2	125	71/2	Typhoid. Phthisis.
828 839	28 46	5 111/2	143	48	Paralysis of Heart.
842	50	5 9 5 84	135	32 44	General Paralysis of Insane.
846	33	E TO	140	10	Caries of Spine.
860	23	5 3 1 1/0	148	46	Inflammation of Brain, Acute.
874	22	5 101/2	140	44	Typhlitis.
898	48	5 11	147	34	Apoplexy.
902	49	5 10	125	31	Congestion of Liver, Acute.
903	28	5 11	145	51	Casualty. Pneumonia.
920	34 38	5 10	143	31	Pleuro-Pneumonia.
923	43	60	135	48	Pneumonia.
929	28	5 10	135	2	Suicide.
937	31	4 11	98	69	Drowned.
940	25	60	145	56	Phthisis.
944	22	5 10	140	19	Pneumonia.
945	50		150	66	Cancer.
955 960	36	5 91/2	125	65	Drowned. Typhoid.
972	21	5 9 5 5 1/2	135	63	Paralysis of Heart.
7/~	- A A	3 3 /2 1	444	40	1 a many on the about

LIST OF 122 DEATHS AMONG PERSONS WHO WERE MORE THAN FIF-TEEN PER CENT IN EXCESS OF THE NORMAL STANDARD WEIGHT.

	eight, d Inches.	Stand	ard Weig	tht.	Fifteen per Cent Excess. Pounds.	Twenty-five per Cent Excess. Pounds.
5 0 1 5 2 2 5 3 4 5 5 5 6 5 7 8 5 5 9 5 10 6 0			120 124 128 132 136 140 144 150 156 162 168 174 180		138 142 ¹ / ₂ 147 152 156 161 166 172 178 186 193 200 207	150 155 160 165 170 175 180 187½ 203½ 210 218
1	Age.	Height, Feet and Inches.	Weight, Lbs.	Lived, Mos.	Cause	of Death.
6 11 14 17 20 41 78 92 97 99 115 134 135 145 162	26 57 36 36 36 50 35 43 44 45 46 41 54 35 56	5 11 5 6 5 10 5 10 ¹ / ₂ 5 10 5 11 ¹ / ₂ 5 8 5 6 5 6 5 6 5 6 5 7 7 8 5 10 5 10 5 10 5 10 5 10 5 10 5 10 5 10	6 175 235 110 2 200 10 111/2 260 8 225 8 200 6 192 6 190 9 198 61/2 190 215 8 180	3 7 8 1 3 4 10 11 18 17 21 12 29 4 19 34	Brain (Congest Heart (Cardiat Heart (Emboli Yellow Fever. Brain (Paralys) Heart (Fatty). Bright's. Ulcer of Stome Casualty. Gastric Ulcer. Suicide. Cholera. Rheumatism at Cerebritis. Brain Congest Spinal Injury.	c Asthma). sm). is). ich. ind Heart.

163					
	59	5 4 6 I	160	9	Apoplexy.
169	57	61	220	4	Brain (Softening).
191	34	5 91/2	195	27	Typho-Malaria.
194	53	5 41/2	175	20	Cystitis.
204	40	5 9½ 5 4½ 5 10½	215	28	Narcotism.
210	41		185	18	Lungs Congestion
212		5 7 5 4½ 5 5½ 5 8	165		Lungs, Congestion. Heart, Valvular Disease.
	59	3 4/2		24	Deight's Disease.
213	42	5 5 1/2	193	30	Bright's Disease.
216	46	5 8	200	20	Casualty.
217	25	5 81/2	200	10	Suicide.
219	36	5 8	185	2	Casualty.
223	42	5 11 ¹ / ₂ 5 10 6 3	245	12	Pneumonia.
236	45	5 10	210	9	Pneumonia.
251	48	63	240	9	Brain Inflammation.
252		56	200	14	Heart, Valvular.
262	59				Honotitia (Acuta)
	45		191	20	Hepatitis (Acute).
266	54	5 81/2	190	17	Atheroma.
273	47	5 9.	205	21	Brain (Congestion).
289	43	5 5 1/2	182	22	Hæmatemesis.
291	45	5 81/2	212	15	Jaundice (Acute).
294	41	5 5 1/2 5 8 1/2 5 8 1/2 5 8 1/2	185	12	Heart, Hypertrophy.
300	30	5 8 1/2	200	15	Casualty.
312	37	5 9 1/2	195	II	Myelitis.
313	43	5 7	176	38	Heart.
315			210		Typhoid Fores
316	30	5 10		45	Typhoid Fever.
	37	5 7 1/2	195	29	Bright's Disease.
323	37 28	5 7,	180	17	Endocarditis.
324	28	5 7/2	195	II	Typhoid Fever.
332	54	5 7 5 7½ 5 8½	185	14	Casualty.
334	41	5 7		28	Bright's Disease.
372	45	5 7 5 8	175	44	Heart.
373	36	5 11	235	44	Aortic Aneurism.
374	40	5 7	180		Bright's Disease.
374 389			198	53	Bright's Disease.
	43	5 9		9	Bright's Disease.
404	59	5 9 5 8	191	34	Typhoid Fever.
422	50		190	34	Pneumonia.
439	35	5 10 6 0	195	22	Bright's Disease.
457	52	60	248	28	Heart Fatty.
460	48	5 41/2	193	29	Apoplexy.
465	38	5 10	235	33	Typhoid Fever.
468	58	5 101/2	220	15	Apoplexy.
469		5 10½ 5 10½	225		
480	44	5 101/2		31	Carbuncle.
	36		229	α	Suicide.
483	46	58	180	41	Heart (Rheumatism).
491	58	5 7/2	186	22	Bright's Disease.
506	58	5 7 ¹ / ₂ 5 5 ¹ / ₂ 5 4 ¹ / ₂	195	36	Apoplexy.
512	38	5 4 1/2	185	4	Brain (Congestion).
513	39	5 3	157	31	Rheumatism (Acute).
514	44	5 11	215	59	Bright's Disease.
515	36		180	44	Bright's Disease. Caries of Spine.
521	44	5 8 6 0½	235	10	Heart (Paralysis).
523	52	61	220		Cacualty Caracysis).
524			180	4	Casualty.
	32	5 7		2	Bowels (Congestion).
531	40	5 101/2	206	27	Liver (Atrophy).
534	46	5 9 ¹ / ₂ 5 8 ¹ / ₂ 5 9 ¹ / ₂	250	33	Abscesses.
535	40	5 81/2	190	51	Brain (Softening).
539	37	5 91/2	200	20	Typhoid Fever.
548	56	59	200	5	Cerebritis.
549	48	F &	179	42	Bright's Disease.
550	59		180		Casualty.
565		5 5 ¹ / ₂ 5 8 ¹ / ₂	185	37	
	45	5 01/			Casualty.
573	51	5 81/2	194	22	Spinal Sclerosis.
577 578 582	45	5 6	187	30	Pneumonia.
570	23	59	200	30	Malarial Fever.
582	54	5 111/2	240	35	Heart (Rheumatism).
585	43	58	185	47	Bowels (Hæmorrhage).
588	59		176	52	Liver (Degeneration).
591	33	5 7 1/2	234		Pneumonia.
596				57	
	32		172	56	Casualty.
599	53	5 8	196	3	Bowels (Inflammation).
601	37	5 101/2	204	13	Suicide.
603	54	5 11	223	21	Pneumonia.
614	51	56	169	20	Apoplexy.
615	56	58	210	24	Heart (Paralysis).
626	49	5 11	225	44	Heart (Paralysis).
649	35	5 9	200	21	Enteric Fever.
669	52	5 5	185		
671	52	5 5 5 8	185	51	Apoplexy.
				21	Suicide.
682	43	5 10	200	45	Apoplexy.
602	57	5 10	200	57	Bright's Disease.
683	47 58	5 8½ 5 8½	185	12	Casualty.
688	58	5 81/2	214	10	Brain.
689	59	5 10	205	22	Brain (Paralysis.
694	50	5 94	200	21	Cancer.
698	41		160	26	Casualty.
725	36	5 3 5 8	187		
				51	Nephritis.
742	37		230	13	Bowels.
755	54	58	192	16	Heart.
759	54	5 9	190	54	Bright's Disease.
760	59	5 10	220	31	Brain (Softening).
799	34	5 7	180	43	Cancer.
799 804	31	27	182	53	Bladder.
823		F 6	170		Heart (Paralysis).
825	47 38	5 61/2	180	7	
831	50	5 6½ 5 8½		43	Nephritis (Acute).
838	58	5 81/2	236	17	Apoplexy.
8	48	5 6	174	72	Apoplexy.
845	36	5 83	235	41	Œdema of Glottis.
052	57	5 4	182	45	Heart (Fatty).
863	51	5 5	165	21	Suicide.
872	37	5 5 5 6	170	67	Liver (Atrophy).
906		5 6 5 7 5 6½ 6 0			Bright's Dicease
	54	2 61/	212	60	Bright's Disease.
915	38	5 61/2	170	52	Tetanus.
935	50	00	245	66	Heart (Valvular).
962	33	5 7 1/2	193	42	Diabetes.
	50	5 7	175	74	Apoplexy.
969		5 4	175	54	Cancer.
909	51				

Mos.

Cause of Death.

Let us now reverse the picture. Among the 974 deaths were those of 122 members who, on joining the Society, were fifteen per cent or more *above* the weight assumed to be the normal one.

Of these, leaving out fifteen who died of casualities and five who committed suicide, fifty-six, or about forty-six per cent, died of some lingering illness, and forty-six of

acute attacks.

Twenty-six of the deaths were from disease of the brain or spine (twelve being apopletic); twenty-four from disease of the heart and circulatory system; sixteen from disease of the kidneys and urinary organs (including twelve of Bright's disease); eleven died from disease of the abdominal organs; fourteen from zymotic diseases; and seven of acute lung diseases. None died of phthisis, and but three of cancer.

It will be remembered that among the *light* weights, ninety out of 138 were under forty years of age on joining, but of these *now* under consideration eighty-three of 122 were *over* forty when admitted, forty-three between fifty and sixty, and only four were less than thirty. Their

average age was forty-five years.

Twenty-eight died in less than a year after being taken into the society; thirty-six in between one and two years; twenty-four in between two and three years; seventeen in between three and four years; twelve in between four and five years; and but five lived more than five years.

The average duration of their membership was twenty-

seven months.

Now in that border-land, as I have called it, between fifteen per cent and twenty per cent, among the heavy weights there were but forty-seven who have died (whilst there were, it will be remembered, 105 of the light weights), and of this forty-seven, twenty died of cerebral or cardiac affections, eleven from casualties and suicides, eight of zymotic and intestinal disease, six from urinary complica-

tions, and two from cancer.

It is not until we get beyond the twenty per cent line in this class that the principal part of the deaths occur, namely, seventy-five, thirty being from brain or heart disorder. Going still farther, it appears that there were forty-nine whose weight was more than twenty-five per cent in excess of the standard, some of these exceeding forty per cent, and a few reaching even fifty per cent beyond that rate. But of these excessive weights the cause of death was hardly what might have been anticipated, for there is no increased preponderance of brain or heart disease, the figures of those over twenty-five per cent being twenty-two in those diseases, six of diseases of the kidneys, six casualties, nine zymotic and digestive diseases, and all other causes six, the character of the changes which proved fatal seeming to be rather those peculiar to senile degeneration than those of fatty changes, it being borne in mind that more than a third of the men of excessive weight were over fifty years old, and more than two-thirds

If, in summing up, the results of the two classes of cases be compared, it is to be noticed, first, that the *number* of those dying who are deficient in weight is greater than of those who have a superabundance of adipose tissue.

This point cannot be accurately tested, of course, without knowing how many of each class have been admitted to the order, and this could only be done by too great labor; but I am satisfied that the number of those admitted who are fifteen per cent or more above weight is greatly in excess of those fifteen per cent or more below the standard, while the deaths, as has just been said, are more frequent among the latter.

It further appears, too, that as to the character of diseases to which they succumb there are more of those light in weight who die of chronic constitutional diseases, and more of those heavy in weight who die of accident, zymotic or acute diseases, though many of the latter fall victims to diseases of the arteries and the heart. Sudden deaths also are much more frequent with the heavy weights.

Still farther, it seems that the deaths are not so frequent of the heavy men who are but little (fifteen to twenty per cent) above the standard as among the light weights who

are fifteen to twenty per cent below.

The conclusion which I have therefore reached from these observations is, very briefly, this: that for life insurance purposes men whose weight is above that laid down in the usual tables are better risks than those whose weight is less; that among the latter (light weights) the usual variation of twenty per cent which is assumed to be within safe limits, is not safe, and that if we accept men, especially young men, whose weight is fifteen per cent below the standard, we are approaching dangerous standing ground, and inviting, as it were, deaths from phthisis and wasting diseases; and when we reflect how great is the mortality from phthisis in all insurance organizations we cannot too strongly emphasize the necessity of constant vigilance in this direction, and of not only exploring most carefully the chests of such men, but also of taking into account all these other features, which I think often precede the changes in lung tissue discernible by the ear, and may be observed at what may be called the pretuberculous stage.

With the heavy weights the case is different: free from danger of phthisis, we must, to be sure, take the greatest care to see that the heart and kidneys are healthy, and that the family history does not point to cerebral disease. With these points well guarded, I am satisfied that an excess of twenty-five per cent in weight is not dangerous in men who have not injured or are not injuring themselves

by alcohol.

It may be said very truly that much in both classes must depend on the family history and inborn tendencies to disease of the parties, and that in this resume I have not dwelt on this subject, but in most of the cases here cited, the family history did not indicate danger from constitutional disease, because the greater number of such applicants as have anything unfavorable in those respects are rejected when they apply. These tables, therefore, have been made up largely and almost entirely of men whose deficiency or excess of weight was the only unfavorable feature at the time of their being accepted, this feature not having been then regarded as sufficiently important to have a determining effect on the question of rejection.—Boston Medical and Surgical Journal.